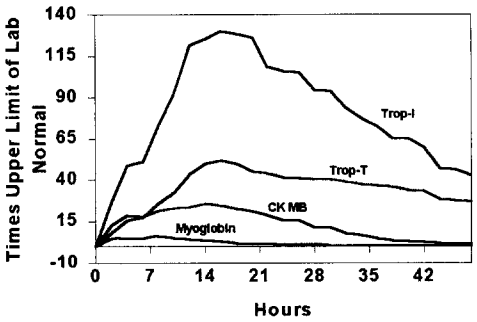
ments occurred at the following time-points: CK MB 14 hrs, myoglobin 8 hrs, troponin-T and troponin-I 16 hrs. Only myoglobin fell to normal within 48 hrs.
Conclusion. This is the first human study to track the time course of cardiac serum marker release following a MI when the precise timing of vessel closure was known. Our results are consistent with previous human studies of marker elevation after MI symptom onset. Therefore, symptom onset appears to be a reliable surrogate for vessel closure in an acute MI.



ORAL CONTRIBUTIONS

840 Etiological Entities as Predictors of Risk in Acute Coronary Syndromes

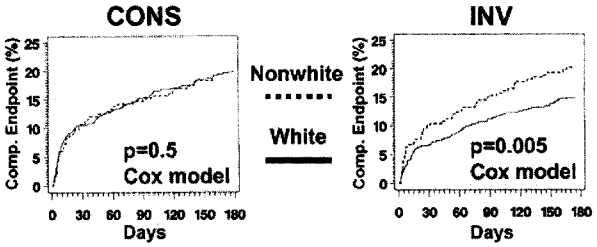
Tuesday, March 19, 2002, 8:30 a.m.-10:00 a.m.
Georgia World Congress Center, Hall D1

8:30 a.m.

840-1 Nonwhite Race Is Associated With a Higher Rate of Death and Ischemic Complications in Patients With Acute Coronary Syndromes Despite Modern Early Invasive Treatment

Marc S. Sabatine, Gavin J. Blake, Mark H. Drazner, David A. Morrow, Laura A. Demopoulos, Peter M. DiBattiste, Carolyn H. McCabe, Christopher P. Cannon, Eugene Braunwald, *Brigham and Women's Hospital, Boston, Massachusetts.*

Background: In administrative databases and registries, nonwhite patients have been shown to be less likely to undergo invasive procedures and to have higher rates of adverse cardiac events. We sought to determine the association between race and outcome in patients with UA/NSTEMI receiving modern therapy in a clinical trial.
Methods & Results: Of 2220 patients in TACTICS-TIMI 18, 498 were nonwhite (22.4%). All patients received aspirin, heparin, and upstream tirofiban and were randomized to invasive (INV) vs. conservative (CONS) management. In a Cox proportional hazards model that adjusted for confounders (including age, sex, cardiac risk factors, prior cardiac disease, ST deviation, and troponin elevation), nonwhite patients were at significantly increased risk for the composite endpoint of death, MI, or rehospitalization for ACS [hazard ratio (HR) 1.34, p=0.026]. When stratified by randomized treatment assignment, in the CONS arm there was no difference in outcome (HR for nonwhite patients 1.14, p=0.5), but in the INV arm nonwhite patients were at significantly higher risk (HR=1.70, p=0.005). Inclusion of angiographic extent of CAD and LVEF into the Cox model for patients in the INV arm did not diminish the increased risk associated with nonwhite race (HR=1.88, p=0.006).
Conclusion: In UA/NSTEMI, nonwhite patients assigned to invasive therapy are at significantly higher risk for death and ischemic complications. The reasons for this disparity are unclear and warrant further exploration.



8:45 a.m.

840-2 HIV Disease and Acute Coronary Syndromes

Randy B. Gould, Nicole B. Pearlstein, Mary C. De Voe, John T. Coppola, Frederick P. Siegal, John A. Ambrose, *Saint Vincent Catholic Medical Centers of New York - Manhattan Division, New York, New York.*

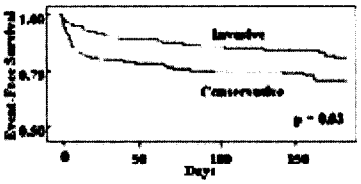
Background: Sporadic cases have been reported of the association between HIV disease and acute myocardial infarction. There are no large series and the response to interventional techniques is unknown. Our hospital center is a large referral base for HIV disease with 1500 to 2000 patient admissions per year.
Methods: We retrospectively reviewed charts of patients with ICD-9 codes (International Classification of Disease, 9th Revision) for HIV disease and acute coronary syndromes at our hospital between January 1996 and December 2000. Fifty patients with either unstable angina or myocardial infarction were identified. This represented approximately 0.6% of all HIV patient admissions during that time period.
Results: Of the standard cardiovascular risk factors, one or more were present in 88% of the patients and only 5 patients were recently using cocaine. Forty-five (90%) of the patients were men and the mean age was 49 ± 9 years. The average duration since diagnosis of HIV infection was 7.8 ± 4.7 years, the average CD4 count was 426 ± 290 x 10^3 and twenty-nine (58%) were taking protease inhibitors. Forty-five (90%) underwent cardiac catheterization during admission and 40 had significant (>50% diameter stenosis) coronary artery disease (42% with 1-vessel disease). Patients with (n=21) or without protease inhibitor (n=29) use were not significantly different in clinical, demographic or angiographic characteristics. Twenty-five (50%) underwent percutaneous coronary intervention and 9 (18%) other patients had a coronary artery bypass graft surgery with an overall in-hospital mortality of 2.9% (0% in percutaneous coronary intervention).
Conclusion: In a large population of patients with HIV disease, admission for acute coronary syndromes is uncommon. This descriptive study indicates that nearly all have one or more traditional risk factors. Percutaneous coronary intervention or coronary artery bypass graft surgery cna be done safely with a low in-hospital mortality. Controlled, prospective data are required to assess if there is any direct association between HIV disease and acute coronary syndromes.

9:00 a.m.

840-3 Benefit of Invasive Strategy for Women With Acute Coronary Syndromes: Observations From the TACTICS-TIMI 18 Trial

Ruchira Glaser, Howard C. Herrmann, Sabina A. Murphy, Laura A. Demopoulos, Peter M. DiBattiste, Christopher P. Cannon, Eugene Braunwald, *University of Pennsylvania Medical Center, Philadelphia, Pennsylvania, Brigham and Women's Hospital, Boston, Massachusetts.*

Background: Women with acute coronary syndromes (ACS) in the FRISC II trial had a worse outcome with invasive (INV) versus conservative (CON) management. However, this and other studies of management in ACS were performed before widespread use of glycoprotein IIb/IIIa inhibitors and stents.
Methods: We compared the baseline characteristics and primary endpoint (death, MI, rehospitalization for ACS by 6 months) of 757 women and 1463 men treated with tirofiban and randomized to INV versus CON strategy in the TACTICS-TIMI 18 study.
Results: Women were older, smoked less, and had less prior MI and coronary artery bypass grafting (CABG). Women presented less often with elevated cardiac markers, but there was no difference between men and women in TIMI risk score. Angiography and intervention rates were similar, but women had less severe CAD, including no critical lesions in 17% vs 9% of men (p<0.001). CABG rates were lower in women(15% vs 22% of men, p=0.003), but 30-day surgical mortality rates were similar. Finally, women and men had similar benefit from an early INV strategy (interaction p for gender = 0.6). The benefit was greatest in women with elevated troponin (primary endpoint of 18.6% vs 29.0% in INV and CON arms, respectively, p=0.03) (see figure).
Conclusions: Women with ACS had more risk factors than men and similar TIMI risk scores, but had less severe CAD. The benefit of tirofiban combined with an early INV strategy was similar in women and men, and enhanced in women presenting with elevated troponin T levels.



9:15 a.m.

840-4 Dramatic Increase in 30-Day Mortality in Diabetic Patients With Non-ST Segment Elevation Acute Coronary Syndromes

Marco Roffi, Leslie Cho, Deepak L. Bhatt, Jennifer A. White, David J. Moliterno, Robert A. Harrington, Eric J. Topol, *The Cleveland Clinic Foundation, Cleveland, Ohio, Duke Clinical Research Institute, Durham, North Carolina.*

Background: Limited data are available on outcome of diabetic patients presenting with non-ST-segment elevation acute coronary syndromes. **Methods:** We performed a pooled analysis of 4 glycoprotein IIb/IIIa inhibitor-acute coronary syndrome trials, PARAGON A, PARAGON B, PURSUIT, and GUSTO IV, and addressed the impact of diabetes on 30-day mortality. **Results:** The Kaplan-Meier curves for 30-day mortality in diabetics and nondiabetics are shown in the Figure. Multivariate analysis demonstrated that diabetes was an independent predictor of mortality in the overall study population (hazard ratio 1.58, p<0.001). Subgroup analysis among diabetic patients demonstrated following 30-day mortality rates: 7.7% for age >65 years vs. 2.7% for age ≤ 65 years (p<0.001); 6.5% for insulin-dependent vs. 5.1% for non-insulin-dependent (p<0.037); 12.6% for creatinine >1.5 mg/dl vs. 4.8% for creatinine ≤ 1.5 mg/dl (p<0.001). In a multivariate regression model, reduced renal function, ST-segment depression on ECG, insulin dependent diabetes, and history of congestive heart failure, were all significant independent predictors